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### Employee participation in Europe

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# **EMPLOYEE PARTICIPATION IN EUROPE**

## **In search of the high participative workplace in Europe**

Dr. Erik Poutsma, Dr. John Hendrickx, Prof. Dr. Fred Huijgen

**SOM-theme A**

**Primary processes within firms**

### **Abstract**

This report presents an overview of practices on participation schemes in companies in different European countries. It is based on a secondary analysis of the 1996 EPOC-mail survey data among managers of profit-sector establishments in ten EU countries. The paper offers a description of the diversity of the extent and nature of participative workplaces in European countries. Hence, it analyses the interrelationships between several forms of participation schemes and indicators for the participative nature of the workplace: schemes for direct participation (DP) of employees, i.e. group consultation and individual and group delegation; schemes for financial participation (FP), i.e. employee ownership and profit sharing; and the arrangements for indirect, employee representative participation (ER). Based on a multivariate analysis of the intensity of participation schemes, a profile of high participative workplaces is presented. Typifying these workplaces we focused on country factors, management practices and workplace characteristics.

# EMPLOYEE PARTICIPATION IN EUROPE

## In search of the high participative workplace in Europe

### 1. Introduction

Performance without a deliberate view on the contribution of involvement and participation of employees appears to be outdated. High involvement and partnership to meet global competition and demands on flexibility seems to be normal practice in European companies or is debated in management-teams, at least according to much of the management literature. However, there appears to exist a wide variety in forms of participation and involvement schemes and practice appears not to follow theoretical outlines and management-prescriptive literature. Moreover, there exists diversity in the diffusion and use of different schemes between European countries. Practices in certain countries appear to commit to schemes on participation by representatives; company-practices in other countries appear to stress the importance of more direct participation by way of, for instance, group work; and in other countries preferred practices focus on employee ownership.

This article presents an overview of existing practices on participation schemes in companies in different European countries. It analyses the interrelationships between three forms of participation schemes: First, schemes for *financial participation* (FP), i.e. employee ownership and profit sharing; and second schemes for *direct participation* (DP) of employees, i.e. consultation and delegation; third *employee representation* at the establishment level. The paper discusses the interrelationship between these practices and discusses interpretations of the existing diversity of practices between companies in different European countries. The central research question is: What is the level of diffusion of participation practices in European countries and what explains their existence?

This paper is based on a secondary analysis of survey data from the research project Employee Participation in Organisational Change (EPOC) commissioned for the European Foundation for the Improvement of Living and Working Conditions in 1996. The survey covers data from establishments in 10 European member states. Most

of the questions concern the *largest occupational group in the establishment*. This implies that the analysis does focus on broad based schemes and not on management and higher staff participation. Two types of financial participation schemes are included in the analysis: share ownership and profit sharing. These forms of financial participation are typical for the profit sector. Due to this we will exclude public sector workplaces from the analysis.

In the next paragraph we present a general background for the phenomenon of participation. After some introductory notes on the actual interest in the participation theme, the conceptual framework of the research is presented, followed by definitions of the various schemes. A short review of existing research literature is given that highlights important variables that should be incorporated in the analysis. Paragraph 3 discusses the methodology of the EPOC Establishment Survey and sets out the focus of the analysis. In paragraph 4 the results of the analyses are reported. The report concludes by discussing the results.

At this place a word of warning: we present a *secondary* analysis of the EPOC. The survey was conducted with a slightly different focus than the one we took for this paper. This implies that the literature review comes up with important variables to be included in the analysis but for which the available survey does not always contains the appropriate indicators.

## **2. Conceptual framework of the research**

### **2.1 Participation in Europe**

In Europe the participation issue has always been an important aspect of organisation and management in companies. Also, different European governments have traditionally developed legislative arrangements to promote the involvement of employees. Recently a shift towards the issue of direct participation away from the more statutory indirect participation can be notified. Generally this shift is explained by increased and more global competition and increased flexibility requirements. The significance of direct participation is widely recognised by the social partners as the

EPOC's study of their views confirms (Regalia, 1995). This suggests, at the very least, a shared industrial relations culture and, in some cases, increased co-operation between the social partners.

Also on European level the issue of employee involvement and new forms of work organisation is seen as a major step towards improved quality of production and improved quality of working life as expressed by the European Commission's Green Paper *Partnership for a new organisation of work* published in April 1997. The need for direct participation in the organisation seems to become a 'new conventional wisdom' (Osterman, 1994: p.173).

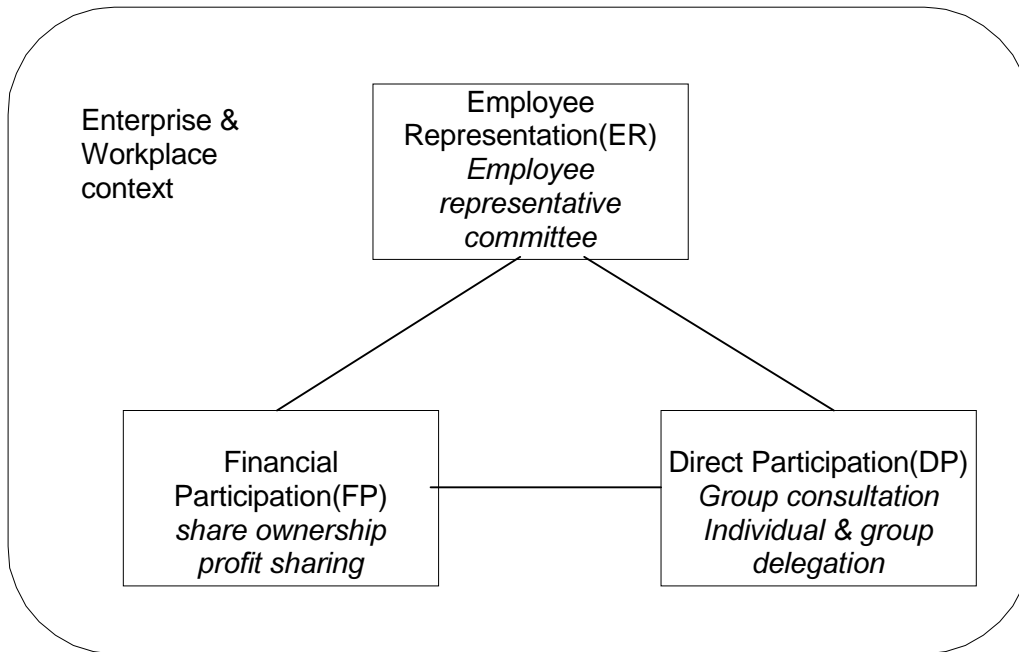
This conventional wisdom cannot be discovered for financial participation. Although the European Commission has developed resolutions and studies to promote this type of participation the spread and use in Europe is rather low (PEPPER II, 1996; Poutsma and Huijgen, 1999). Recently a growth of management's interest in increased application of performance related remuneration as an involvement instrument has led to an increase of experiments. One of the arguments for putting financial participation into practice is to commit employees to the company and to develop an entrepreneurial attitude. Of course, these arguments suggest an alignment with the reasons for putting direct participation into practice. That is, direct participation is believed to enhance involvement and commitment, to improve quality and productivity, to enhance the competitiveness of enterprises. Indeed, participation is a key ingredient in management strategies utilising 'high commitment' or 'high involvement' policies (Lawler, 1986). To use popular buzzwords, the purpose of these policies is to 'empower' employees and develop 'high performance' workplaces. In the course of these strategies there appears strong evidence that employee share ownership, when combined with indirect and direct participation does increase productivity. Put another way, employee share ownership and participation (both direct and indirect, representative) tend to reinforce each other (Jones and Pliskin, 1991; Poole and Jenkins, 1993; Logue and Yates, 1999). In some instances this alignment of arguments for the different participation forms is presented as the partnership company, which covers high participation practices on all levels and all issues, i.e. the high involvement company.

However, this alignment-argument is not without critics. Different types can have quite different and conflicting objectives and functions. Financial participation might aim at flexible profit related pay on an individual basis, while direct participation might aim at improving the co-operation between workers. Also, indirect representative participation might conflict with financial participation since the former mainly focuses on collective solidarity and social justice in labour terms, while financial participation tends to stress diversity and flexibility in rewards. Also the prevailing trend towards more participation is questioned. In a review of the program of research on influence sharing practices Heller (1999) concluded that organisational influence sharing appears to have made only limited progress during the last 50 years.

In this paper we focus on the phenomenon of high participation practices. Central questions are: What is the spread and use of different participation schemes in Europe? What determines its existence? Are these practices somehow related to each other, which could be denoted as 'high participation practices'? What is the spread and use of these high participation practices and what determines its existence?

Our study uses a conceptual model that focuses on the interrelationships of the different types of participation. Figure 1 presents an overview of the various forms of participation and the conceptual model used for the investigation. The survey allowed for several indicators for these practices. Measures of intensity of participation were possible especially for direct participation practices and to a lesser extent for employee representative participation. Only for financial participation the indicator was limited to yes or no existence of a scheme.

**Figure 1 Types of involvement and participation**



## **2.2 Explaining participation: conceptual framework of the research**

### *New Production Concepts: Direct Participation and new forms of work organisation*

In the mid 80's several studies reported a "fundamental change regarding the use of labour" within companies (Kern and Schumann, 1984). Work rather than technology was now regarded as the main factor in national and international competitiveness. Most important, organisation was no longer seen as a measure to arrange work around an existing technology, nor was work organisation only treated as a means for humanisation and motivation. It was now considered the major factor to enhance productivity and maintain competitiveness. Discussion of this 'paradigm change' in Germany began with the publication of the aforementioned book by Kern and

Schumann. This emphasised the role of human qualifications and direct participation in the production process and generated the term 'Neue Produktionskonzepte' (New Production Concepts).

In the Netherlands and Sweden parallel to this discussion and partly inspired by new production concepts much work organisation research and literature was focused on sociotechnical design. In 1981 Dutch scientist De Sitter published a book on Swedish experiences with group work. In the following years a series of design practices started in both the Netherlands and Sweden.

The MIT-study of Womack, Jones and Roos (1990) looked at different versions of New Production Concepts in the car industry. The authors compared Japanese automotive factories with European and US car companies and identified that the Japanese style of production organisation ('Toyotism') was much more efficient in that it achieved car production in half the time, half the space and with half of the costs. The authors attributed this efficiency lead not to the use of advanced technology but to the new forms of work organisation that pervade the whole firm, i.e. 'Just-in-Time systems' and 'teams'. The public and scientific debate on teams following this study can be taken as one origin of the EPOC project, and various hypotheses, questions and expectations deriving from the debate went into the conceptual approach of the EPOC project on participation. Team-based work and empowerment appear to be major issues in recent management concepts (see for an overview Fröhlich & Pekruhl, 1996)

#### *Economic and Industrial democracy*

From an historical perspective, industrial democracy was much more important in most European countries throughout this century, whereas the first wave in economic democracy is present only in the 1980's. Indeed, most European countries have experienced some form of employee participation in decision making, whether through works councils or co-determination on company boards, which has also been enhanced by EU's active promotion of industrial democracy. On the contrary, forms of economic democracy have, until the 1980's, been limited in extent, and it is only in the past decade that a new and growing interest in financial participation schemes has emerged.



### *Company characteristics*

Taking a contingency perspective and given the empirical research on motives and effects it is expected that both direct participation and financial participation is important for those companies that face dynamic environments, that have to compete on quality and variety. This environment is reflected in organic structures with greater task interdependence and required flexibility due to greater variety in products and services. Scarcity on labour markets tends also to enhance the use of these schemes to commit employees to the company and the company's objectives. This holds especially for qualified professionals in knowledge-intensive service industries. Employee representation tends to develop along legislative arrangements and is more found in larger workplace and in places where unions have a role to play. It is less found in young, small growing companies. In addition financial participation schemes are more often found in young growing firms and less applied for employees with labour terms bound by collective labour agreements, these were found to be implemented for higher qualified professionals and commercial personnel, these were found to a lesser degree in companies with substantive degrees of unionism and more often seen as a remuneration instrument for staff and management, these were not found in independent family owned companies but are more established in larger public companies listed on stock markets (see for an overview of the different contingencies: Heller et al. 1998; Fröhlich & Pekruhl 1996; Sisson 1996; Mol, Meihuizen & Poutsma, 1997; OECD 1995; Lammers & Szell 1989; Poole & Jenkins 1990; Poutsma & Van den Tillaart 1996).

One of the important internal influences shaping participation is the range of values and beliefs, and strategies held by the actors involved. These actors include the managers, individual employees, workgroups and their representatives who are involved in the decision-making process of the organisation and the bodies concerned with participation (Cf. Long, 1982; Mygind and Rock, 1993, Cotton, 1993). Participation is more developed in organisation where management is convinced of the strategic function of it.

### *Institutional context*

With respect to the influence of the institutional and legal context the European countries do exhibit varying levels of interest and qualitatively different legislative programmes, regarding direct participation, employee representative participation *and* financial participation. The statutory structures of the Federal Republic of Germany, and the Works Council legislation in the Netherlands can be contrasted with the more voluntary systems in the United Kingdom, Italy and Ireland. The elaborate arrangements on financial participation in the UK and France can be contrasted with the almost non-existence of governmental regulations and provisions in Denmark, Sweden, Italy and Spain (cf. the PEPPER reports). In France the implementation of a profit sharing system is even mandatory for companies with more than 50 employees.

More specifically research on direct participation and new technologies shows a variation of methods and schemes of participation as great within each country as the variation between countries (Cressey & Williams 1990). However, certainly some legislation particularly of the supportive and non-regulatory type - may favour participation in Europe. Recently the phenomenon of privatisation has had an important impact on the growth of share-ownership in the whole of Europe, for instance in the UK, France, Italy and Spain. Hence, multinational companies face difficulties to transnationalise their participation schemes and ask for more support on European level.

Employee share ownership schemes are part of corporate governance systems with a greater emphasis on participation by employees. Again, discussions and (conflicting) interests on this topic within corporate governance systems will influence the existence and diffusion of these schemes. Again, given the differences in corporate governance systems within Europe, it is to be expected that divergence rather than convergence will be the outcome in the way these schemes are implemented in different European countries. In our analyses of the differences in dissemination of schemes we will use a typology of corporate governance systems developed by Weimer & Pape (1999). Weimer and Pape(1999) distinguish four models of corporate governance (see table 1) . The criteria for classification involves several factors of which the most important ones are: the role and position of the state, financial systems and institutions, the influence of employees and their representatives, ownership and control-structures

and performance related behaviour of management. Scheme 2 summarises the characteristics of the four models (Broekhof, 1999) and includes typical countries.

Scheme 2

System	Anglo-saxon	German	Latin
Examples	USA UK Canada Australia	Germany Netherlands Switzerland Sweden Austria Denmark Norway Finland	France Italy Spain Belgium
Open market oriented systems versus more closed network oriented business systems	Market	Network	Network
Business concept instrumental or more institutional	Instrumental, share holder value	Institutional	Institutional
Control structure: one tier or more; division on control	One tier (one board of directors with 'internal' and 'external' members)	Two tier (division between execution and control)	Optional (normally one tier)
Influence of stakeholders	Share owners	Industrial banks; employees, diversity	Financial holdings, government, families, diversity
Importance of stock market	High	Medium/ high	Medium
Active market of take-overs, buyers and sellers	Yes	No	No
Relative concentration of ownership	Low	Medium/high	High
Performance related pay of management	High	Low	Medium
Time-horizon of economic relationships	Short term	Long term	Long term

Source: Weimer and Pape (1999), moderation by Broekhof (1999) and authors

Not only at the level of national industrial relations and corporate governance systems we touch upon substantial differences. Research carried out by Hofstede (1980), Maurice et al. (1982), Gallie (1983), Sorge & Warner (1987), Hampden-Turner & Trompenaars (1993), Lessem & Neubauer (1994), Gatley (1996) and many others, has shown that the way in which organisations in a country are structured and managed is strongly influenced by national specific social and cultural factors in such a manner that one can even speak of societal patterns of management and organisations (Lane, 1989). Despite differences encountered in companies within the same country there is nevertheless a specific recognisable societal pattern that emerges between countries. This implies that also the employment relationship in companies is influenced by national specific social and cultural factors. Within this perspective it is to be expected that workers and employers in different countries will have a different attitude towards participation in general and towards financial participation in particular (Poutsma, Benders, Van Hootegeem en De Nijs, 1996). Whereas American managers tend to assume the link between variable pay and corporate performance (given their cultural inclination towards short-term performance measures), European managers (given their cultural rejection of short-termism) need to be convinced of the connection, preferring to proceed in a direction that reflects their ‘may be’ and ‘in certain organisations’ philosophy (Sparrow and Hiltrop, 1994, pp. 517). In his comparative study on variable executive rewards systems Pennings (1993) gives the following quotation of a Dutch manager with respect to his view on the link between remuneration and performance. “We don’t believe in it. Even profit-sharing pay-outs are fixed and can be found in the budget. We would not allow the polishing of results to boost a pay-out. Profits are due to a lot of factors, depreciation, setting of replacement value and so forth.... We differ from the U.S., where historical prices induce people to focus on short-term profits, so that their business becomes very cyclical. People cannot wait five, ten years before they get the results on the basis of which they are paid..... We let the people grow with the business. Their best reward is promotion” (pp, 271-272).

Based on the foregoing short description of literature and the available data we distinguished in our analysis the following contextual variables divided into two categories: global characteristics and conditional factors. The global characteristics include country (including dummy variables for corporate governance and culture), size

of the workplace, sector and the occupational groups that make use of the participation schemes. Conditional factors include the scope of competition, ownership, labour terms bound by collective labour agreement or not, percentage union-membership, degree of innovation, management attitudes towards participation, employment growth, and qualification-level of the workforce

### **3. Methodology: The EPOC Survey**

The data used here were collected for the EPOC survey (EPOC Research Group 1997) that was commissioned by the European Foundation for the Improvement of Living and Working Conditions. The main purpose of the EPOC survey (Employee direct Participation in Organisational Change) was to establish the incidence of different forms of direct employee participation in different countries. A mail survey directed at the (general) manager of a sample of establishments was used to collect information on workplaces in ten European countries: Denmark, France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the UK. For larger countries (France, Germany, Italy, Spain, the UK) the gross sample was 5000 workplaces; for medium sized countries (Denmark, the Netherlands, Sweden) it was 2500 and for the smaller countries (Ireland, Portugal) it was 1000. As is often the case for mail surveys, the response was not very high. The overall response rate was almost 18 percent, varying between 9 percent (Spain) and 39 percent (Ireland). It is not out of line, however, with comparable cross-national postal surveys of Price Waterhouse Cranfield (PWC) (Brewster and Hegewisch, 1994) and Harzing (1997). The overall return rates of usable questionnaires were 17 and 20 per cent, respectively, which is close to the EPOC response rate. The total number of respondents was 5786. Due to our interest in share ownership and profit sharing we focused on the profit sector, leaving data for analysis on little more than 4,600 establishments.

The EPOC survey was restricted to establishments with at least 50 employees in the non-agricultural sector and was stratified by firm size and sector. Larger firms were over sampled, as were firms in the construction sectors, whereas firms in the services sector and industries were under sampled. To take this into account,

appropriate weights based on sector, firm size, and country were used to make the data representative for a selection of European countries.

### **Dependent variables**

In the analyses below, we will examine factors influencing the occurrence of financial participation, direct participation, and employee representation. In measuring financial participation, we can distinguish two dimensions, *profit sharing* and *share ownership*. Dummy variables were constructed on the basis of questions 20, “Please indicate if employees in the largest occupational group are eligible for membership of the following:” with “profit sharing schemes”, “share ownership schemes”, and “none of the above” as responses.

Direct participation was measured by creating an index using questions 24c, 24d, and 28a. Question 24c asked “Has the management given INDIVIDUAL non-managerial employees in the largest occupational group the right to make DECISIONS on how their own work is performed without reference to immediate manager for one or more of the following?” Question 24d asked “Has the management given to formally introduced GROUPS the right to make DECISIONS on how their work is performed on a GROUP basis without reference to immediate manager for one or more of the following?” Question 28a asked “On what issues and how often are the views of employees in the largest occupational group sought on a GROUP basis?” Each question had 8 items <sup>1</sup>relating to direct participation. An index was created of the number of affirmative responses to questions 24c and 24d and responses of “regularly” to 28a. Firms with 10 to 24 affirmative responses were held to have direct participation in the

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<sup>1</sup> The 8 items for question 24c were: scheduling of work, quality of product or service, improving work processes, dealing with ‘internal’ customers’, dealing with external clients, time keeping, attendance, working conditions. The 8 items for question 24d were: allocation of work, scheduling of work, quality of work, time keeping, attendance and absence control, job rotation, coordination of work with other internal groups, improving work processes. The 8 items for question 28a were: work organisation, working time, health & safety, training & development, quality of product or service, group performance, customer relations, changes in technology, changes in investment. The items for questions 24c and 24d had “yes” and “no”

bivariate analyses. In the multivariate analysis, the direct participation index was recoded into 4 categories: 0, 1 to 3, 4 to 9, and 10 to 24 forms of direct participation.

Employee representation was based on question 21. This asked “Are there any of the following REPRESENTATIVES of the employees in the largest occupational group recognised for the purposes of consultation/negotiation and or joint decision making at this workplace?”. The dummy for employee representation receives a 1 if firms answered affirmatively to one or more of the following three responses: trade union representatives, representatives elected to a works council, representatives to an advisory committee established by management. There are, of course differences between country in the nature and extent of representative bodies. With this procedure we prevent this problem and subsequently in the analysis we controlled for country.

The variables for profit sharing, share ownership, direct participation, and employee representation formed the basic dependent variables in our analyses. In addition, we constructed three combined measures of high financial, direct, and representative participation. *High participation* was defined as either profit sharing or share ownership, plus direct participation, plus employee representation. *High partnership* was defined as share ownership, plus direct participation, plus employee representation. *Top participation* was defined as high participation plus at least limited joint decision making, as measured by the fourth item of question 62. Question 62 asked, “To what extent were employee REPRESENTATIVES informed, consulted, involved in negotiations, or joint decision making about the introduction of the most important practice of participation?” There were 4 items, “informed”, “consulted”, “involved in negotiations”, “involved in joint decision making”, with responses “extensively”, “limited”, and “not at all”.

## 4 Results

### 4.1 Bivariate analyses

First bivariate analyses show some expected interrelationships. Table 1 contains the Pearson correlations among the different types of participation. There are significant correlations between profit sharing and the three other types, and between share

ownership and direct participation. Only employee representative participation does not associate with share ownership and direct participation which suggests at least question marks concerning the alignment argument and wide spread existence of the combination of participation forms.

Table 1 Correlations between different types of participation

	profit sharing	share ownership	direct participation	employee representation
profit sharing	1			
share ownership	.165**	1		
direct participation	.105**	.053**	1	
employee representation	.089**	-.018	.007	1

Table 2 presents a further insight into the combination of participation forms. Direct participation is split into three types of intensity of direct participation: individual delegation, group consultation and group delegation (i.e. teamwork). Intensity includes an index of the number of issues of which the views of employees is sought.

From this analysis it appears that for *profit sharing* management attitude towards participation plays also a role. Management's opinion that Direct Participation is important for competitiveness correlates with the existence of financial participation schemes. Hence it appears that a high level of group delegation, i.e. teamwork in the organisation contributes to profit sharing and that employee representation must be available.

For *share ownership* it appears that high individual delegation contributes to its existence. While the bi-variate association suggest that there is no relationship between employee representative participation and share ownership is this regression analysis employee representation doe contribute to the existence of share ownership. This fits the theoretical perspectives of monitoring agents with delegates tasks and of the longer term arrangements of commitment to company objectives via the involvement of employee representatives.



Table 2 Summary results of selected variables in a logistic regression model for profit sharing and share ownership (including other selected independent variables; see text)

		profit sharing	Share ownership
Direct participation plays a major role in competitiveness		**	
	agree	.33**	.08
	disagree	-.12	.17
	no answer	-.21*	-.26*
Intensity of individual delegation			**
	none	-.14	-.32**
	low	.02	-.43**
	medium	.03	.12
	high	.09	.62**
Intensity of group consultation			*
	none	-.19**	-.33**
	low	.07	.16
	medium	.06	.08
	high	.06	.09
Intensity of group delegation		**	
	none	.02	.21
	low	-.29**	.09
	medium	-.13	-.13
	high	.39**	-.17
Employee representation		**	**
	No	-.54**	-.14
	Yes	.16*	.49**
	missing	.37**	-.35
Constant		-1.94**	-3.59**

\* significant at .05

\*\* significant at .01

### **The incidence of higher participation forms**

In this paragraph we present a brief insight into contextual and enterprise characteristics of the distinguished more intense types of participation: *high participation*, *high partnership* and *top participation*. The analysis is bivariate since the numbers are very low. Table 3a shows the independent variables used in these analyses and the percentage of occurrence of each type of *high* participation. The sample was limited to firms in the profit sector. In addition, we omitted Portugal due to the fact that no information was available on fiscal and ownership policies in this country for the analysis of country effects below. A single asterisk indicates that the variable has a significant bivariate association<sup>2</sup> with the type of participation in question at a 5% level of significance, two asterisks indicates a significant association at a 1% level. The chi-square values on which these are based are presented in table 3b.

< table 3a about here >

< table 3b about here >

### **High participation**

High participation entails either profit sharing or share ownership, together with both direct participation and employee representation. This combination occurs in only 4.5% of the firms. Country has a significant impact, with a very high rate for France (due to the high numbers of mandatory profit sharing arrangements) and negligible numbers in Italy, Spain and Ireland (3, 4 and 6 unweighted cases respectively, with only 8 in Denmark as well). Sector, size and work type have no significant impact. High participation is more likely in highly competitive firms. Independent or international

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<sup>2</sup> The bivariate associations in table 3a between independent variables and types of participation are based on the Wald Chi-square of a logit model in Stata using population weighting and robust standard errors (StataCorp 1999). Since the data are based on a stratified sample, the usual likelihood ratio chi-square cannot be used here.

ownership does not affect high participation. High participation is more likely if the establishment is bound by a collective agreement. Unionisation does not have a significant impact. A high qualification level, somewhat innovative climate, and importance of direct participation increase the likelihood of high participation, but employee growth has no significant impact.

### **High partnership**

High partnership means share ownership plus direct participation and employee representation. This combination occurs in only 1.8% of the firms. This percentage varies significantly by country, with the UK as the country where it is by far most prevalent, with a percentage more than twice that of second place, France. None of the Italian firms met the criterion of high partnership, and there was only 1 unweighted case in Ireland 3 in Sweden, 4 in Denmark, 5 in Spain. High partnership is not affected by sector. The relationship with size is significant but complicated. High partnership is most likely in the largest firms with more than 500 employees (possibly due to listed stock exchange companies), but very unlikely in small to medium sized firms, with 50-99 employees. This could be affected by small numbers, i.e. there are only 4 and 5 unweighted cases respectively in the first two size categories. Other than this, the independent variables used here do not affect high partnership.

### **Top participation**

Firms with top participation fulfil the criteria for high participation and have at least limited joint decision making as well. Only 56 firms or 1.5% of the sample fulfilled these criteria. There are significant differences among countries, with higher percentages in France, the United Kingdom, and Sweden. The Netherlands and Denmark form a middle category. Top participation is rare in Germany and Spain and does not occur in Ireland or Italy.

Top participation is not affected by sector or size. It occurs almost entirely for commercial type of work and does not occur at all for administrative or clerical work types. Top participation is not significantly affected by intensity of competition. It is more likely if the ownership is independent but is not significantly affected by

international ownership. A collective agreement does not have a significant impact but the absence of unionisation makes top participation more likely. Top participation is also more likely for top qualification levels, but is not affected by technical innovation, employment growth, or whether direct participation affects competitiveness.

## 4.2 Determinant factors for types of participation; multivariate analyses

In this section, we examine the effects of the independent variables on the types of participation while controlling for the others. This will only be possible for the four core dependent variables, profit sharing, share ownership, direct participation and employee representation. The combined measures for high participation, high partnership, and top participation do not occur frequently enough to allow valid inferences from a multivariate model.

Since profit sharing, share ownership, and employee representation are dichotomous, they are analysed using logistic regression. These models treat the predicted probability of the type of participation occurring as a non-linear function of the independent variables. Positive parameters indicate that the category in question of an independent variable increases the probability of participation occurring, negative parameters mean it decreases this probability. The rate of change however will depend on the position on the probability curve (Long 1997).

Direct participation has four categories (0, 1 to 3, 4 to 9, and 10 to 24 forms of direct participation) and was analysed using an ordered logit model. This model looks at the probability of higher versus lower scores. The model produces a different intercept but the same parameters for the probability of categories 2 or higher, 3 or higher, or category 4. Other than this the interpretation is the same as for logistic regression of a dichotomous dependent variable.

As can be inferred from table 3a and 3b, many of the independent variables had a number of missing cases. List wise deletion would lead to an unacceptably low number of valid cases. Instead, we included missing values as a separate category. The deviation contrast was used for the independent variables, i.e. the constraint that parameters sum to zero. A significant effect for the category “missing” will indicate that

missing cases are not random but tend to be composed more of certain categories than of others. It is of course preferable that the category “missing” be non-significant but at least this procedure ensures that the parameter estimates are based on as large a sample as possible. Since the data are from a stratified sample, the analysis was performed on a weighted data set. Many datasets use weights to compensate for unequal sampling probabilities due to a stratified sampling design and/or poststratification to correct for departures from known population frequency distributions. Some researchers do not use these weights in regression procedures, but this produces biased estimates. If the weights are used in a standard fashion, the coefficients are unbiased but their standard errors are too low (Lohr 1999). Instead, we analysed a weighted dataset but used the “pweight” option in Stata to procure robust standard errors (StataCorp 1999), which do take unequal sampling probabilities into account.

The estimation procedure produced robust standard errors that take the sampling design into account. As a consequence, chi-square statistics reported below are based on Wald statistics rather than likelihood ratio values.

### **Profit sharing**

Table 4 shows the parameter estimates for the effects of the independent variables on the participation variables. Asterisks beside the variable’s name indicate the significance of the variable as a whole but ignoring a category for missing cases if present. The chi-square values for each of the model terms can be found in table 4 below.

< table 4 about here >

The parameters show that profit sharing is significantly more prevalent in France (due to mandatory regulations and state promotion) and the UK (due to favourable tax regulations and promotion), and significantly less prevalent in Italy, Spain, and Ireland, while the remaining countries are average. Unlike the bivariate analyses, there are no significant effects of sector. As in the bivariate analyses, there are no significant effects of firm size and work type. A low intensity of competition however does lower the likelihood of profit sharing taking place. Independent ownership (most probably closely

held family firms) significantly decreases the likelihood of profit sharing but international ownership and missing ownership status have no significant effects. A collective agreement and unionisation have no significant effects, but no employee representation makes profit sharing less likely while a high qualification level, employee growth, and a perceived impact of direct participation on competitiveness makes it more likely. In conclusion, growing companies with high-qualified workforce and where management stress the importance of direct participation for competitiveness are more likely to have profit sharing arrangements as well.

### **Share ownership**

The parameters for share ownership show that this is predominantly a British affair, as was found in the bivariate analyses. Sector has no significant effects but share ownership does become more likely as firm size increases. This is in line with the expectation that larger companies tend also to be publicly listed companies. There are no significant effects of work type or intensity of competition. Both independent ownership and international ownership of the establishment make share ownership less likely. A collective agreement and unionisation have no significant effects but employee representation, and higher qualification levels increase the likelihood of share ownership. Technical innovation and employee growth have no significant effects and the only effect of the impact of direct participation on competitiveness is that of the missing category. The negative parameter indicates that firms with no share ownership tended not to answer this question.

### **Direct participation**

Direct participation was treated as an ordered categorical variable in these analyses. Parameters indicate the effect of an independent variable on the log odds of a higher versus a lower score, regardless of where the cut point for “high” versus “low” is placed. These parameters show that the Netherlands, Ireland, and the UK are more likely to have higher levels of direct participation, whereas in Spain in particular as well as in Italy this likelihood is much lower. The parameter for the construction sector is significantly negative although sector as a whole is not significant. Likewise, firm size

does not have a significant effect although higher levels of direct participation tend to become less likely as size increases, significantly so for the second to largest category. If the largest occupational group is active in the production/transportation field of work then higher levels of direct participation are also less likely. Higher levels of direct participation become more likely as the intensity of competition increases. There are no significant effects of independent or international ownership but a missing ownership status does make have a significant positive effect. This effect is difficult to interpret. Collective agreements do not have a significant effect but employee representation does. Unionisation has no impact but higher qualification levels, little technical innovation and a perceived effect of direct participation on competitiveness increase the likelihood of higher levels of direct participation. Employee growth also has a significant impact on direct participation, although none of the individual parameters are significant.

### **Employee representation**

The effects of country on employee representation show that it is more likely to occur in France and Spain and less likely in Denmark. Employee representation is also less likely in the construction sector and more likely in larger firms. Work type, intensity of competition and ownership have no significant effects. A collective agreement increases the likelihood of employee representation and unionisation has an extremely strong impact. Qualification levels, innovation, and employee growth do not significantly affect employee representation, but employee representation is significantly less likely if it is not felt that direct participation affects competitiveness.

Table 5 shows the chi-square values for each of the terms in the models. As noted above, the category “missing” has been ignored when calculating these values. The largest values, ignoring the associated degrees of freedom, tend to be for country. There are also strong effects of unionisation and firm size on employee representation. All other chi-square values tend to be a good deal smaller. The second to last row of table 5 shows the total significance of the model, excluding country. The largest value by far is for employee representation, primarily due to the strong effects of unionisation and work type. The last row of table 5 shows the total association, including country and the “missing” categories. The strongest chi-square value is for profit sharing due to

the strong effects of country on that variable. However, the chi-square for employee representation is only slightly lower whereas the model for this variable has two degrees of freedom less than the others.

Table 5  
Chi-square values of the terms in table 3

	df	profit sharing	Share ownership	direct particip.	employee represent.
Country	8	210.3**	63.9**	84.6**	52.8**
Sector	3	3.9	2.9	5.2	10.1*
Firm size	4	1.5	19.2**	8.7	65.4**
Work type	5	2.6	1.7	11.2*	2.8
Intensity of competition	2	6.4*	.9	7.1*	1.0
Independent ownership	1	13.7**	9.4**	.1	3.3
International ownership	1	.6	9.0**	1.9	.5
Collective agreement	1	.3	1.5	.2	18.4**
Employee representation	1	14.2**	7.2**	16.8**	
Degree of unionisation	3	7.3	2.8	1.4	132.4**
Qualification level	2	7.8*	9.3**	27.2**	1.5
Technical innovation	3	3.5	1.3	20.9**	.6
Employee growth	2	9.5**	1.9	11.0**	1.5
Dir. Particip. & competitiveness	1	7.5**	.0	36.7**	9.8**
Association, excl. country <sup>1</sup>	29	103.14**	84.2**	187.0**	325.2**
Total association <sup>2</sup>	45	406.4**	207.2**	289.3**	404.5**

The missing values category, where applicable, has not been included except for the chi-square value for “total association”

<sup>1</sup> “Employee representation” as a dependent variable has 28 df for “association, excluding country

<sup>2</sup> “Employee representation” as a dependent variable has 43 df for “total association”

### Effects of country

Since country has an important impact on the spread and use of participation schemes we wanted to include dummy variables to try to find out what is behind this rather complex variable. In the theoretical part we mentioned a number of factors that could account for the differences between countries. Most important are government policies and legislative arrangements ( as an expression of national culture and institutions), corporate governance differences, different industrial relations systems and business



cultures. We tried to classify the countries according to characteristics of these systems and arrangements. It must be noted that this is a first rough test. It should be possible to have more refined indicators for country characteristics. The classification of country is mainly based on Weimar and Pape, 1999 and the PEPPER II Report. Table 6 shows five groupings of countries into two categories and one grouping into three, North European, West European, and South European.

Table 6  
Construction of country groupings

Country <sup>1</sup>	Favourable tax policy shares	Favourable tax policy profit sharing	Concentration of ownership high	Importance of stock market	Employee influence	Cultural climate
Denmark					x	N
France	X	x	x			S
Germany	X				x	N
Ireland	X			x		W
Italy			x			S
Netherlands		x			x	N
Spain			x			S
Sweden					x	N
UK	X	x		x		W

Table 7  
Model fit and percentage of possible model fit for the six groupings of countries

	df	profit sharing		share ownership		direct participation		employee representation	
		chi <sup>2</sup>	pct	chi <sup>2</sup>	pct	chi <sup>2</sup>	pct	chi <sup>2</sup>	pct
Favourable tax policy shares	7	162.4**	22.8%	60.2**	5.7%	48.5**	42.7%	52.6**	.3%
Favourable tax policy profit sharing	7	73.5**	65.0%	43.0**	32.7%	64.5**	23.7%	36.1**	31.7%
Concentration of ownership high	7	206.6**	1.8%	54.1**	15.3%	49.5**	41.5%	43.5**	17.6%
Importance of stock market	7	198.7**	5.5%	33.2**	48.0%	70.7**	16.4%	48.2**	8.8%
Employee influence	7	190.2**	9.5%	59.3**	7.2%	78.0**	7.8%	37.0**	29.9%
Cultural climate	6	188.9**	10.2%	32.9**	48.5%	45.1**	46.7%	37.0**	30.0%
Total effects of country	8	210.3**		63.9**		84.6**		52.8**	

Table 7 shows the results of tests that the effects of country as found in tables 3a , b and 4 correspond with the country groupings given in table 6. These tests examine whether parameters for country are equal within each group but differ between groups. These tests have 1 df, or in the case of cultural climate, 2 df less than the usual test for the significance of the term, which ascertains whether all 8 parameters are equal to zero. The lower the chi-square values for the test, the greater the homogeneity of the parameters for country within the groupings. In order to ascertain the overall performance, we also express this as the percentage reduction relative to the total effects of country as given in the last row. This percentage is equal to  $1 - \text{chi}^2/\text{chi}^2_{\text{total}}$

The effects of country on profit sharing can be best grouped according to “favourable tax policy profit sharing”, which reduces the chi-square by 65%. Cultural climate leads to the largest chi-square reduction for share ownership, but “importance of stock market” performs almost as well and is more parsimonious. Cultural climate also leads to the greatest reduction for direct participation but, taking degrees of freedom into account, “favourable tax policy shares” is preferable. For employee representation, “favourable tax policy profit sharing”, “employee influence” and “cultural climate” are important factors.

## 5 Conclusions and discussion

Table 8 summarises the results of this paper. It presents an overview of the most important positive and negative contributors to the type of participation and includes also the impact of country characteristics.

*Profit sharing* appears to be a tax driven instrument. These schemes are more implemented in France and the UK. You find these schemes in companies that have a high-qualified workforce and that experienced employment growth. Management agrees that direct participation is important for competitiveness and tends to organise work via group delegation. Profit sharing is not likely in Italy and Spain and in independent single firms with no employee representation, low direct participation and low competitive environments.

*Share ownership* appears to be driven by cultural climate and the importance of stock market in a country. It tends to be concentrated in the UK. You find these schemes in larger companies with a high-qualified workforce. These companies have employee representative participation and the work is more individually delegated. Share ownership is not likely in medium sized, independent single firms with a low qualified workforce. Slightly unexpected, also internationally owned companies tend not to have share ownership. You find these companies less likely in Sweden.

*Direct participation* is driven by cultural climate in a country and tends to be found in the Netherlands and Ireland. Companies that implements direct participation are innovative and have high-qualified employees. They face more intense competition and management view is that direct participation is important for competitiveness. Direct participation is not likely in Spain and Italy. Direct participation is not likely in production and transport sector and the typical non-participative company has no employee representative, low qualified workforce, faces low competition and is not innovative. Also management disagree on the importance of direct participation for competitiveness.

*Employee representative participation* is driven by the cultural climate and institutionalised employee influence and found more in France and Spain. It is found in

larger unionised establishment where labour terms are bound by collective agreements. On the other hand employee representative participation is obviously not found in smaller, less or non-unionised workplaces without collective labour agreements. Management also disagree with the importance of direct participation for competitiveness. Employee representative participation on establishment level is not common in Denmark.

The paper also looked into the phenomenon of the *high participative workplace* and *high partnership companies* in Europe. Although there are important associations between the different types of participation the survey makes clear that the phenomenon of high participation is rare. Less than 5 % of European establishments combine the types of participation into what might be called the high participative workplace. As far as it is possible to analyse these small number of observations the results tend to support the expectation that high participation is the environment for the high-qualified workforce in companies that face high competition and wants to be innovative.

At this stage we would like to reflect critically on the survey. This paper presents results of a secondary analysis of the EPOC data. This of course implies that certain important factors that might be important for the phenomena under investigation were not clearly defined in the survey or was introduced in the analysis by rough indicators. On the other hand the survey had enough substance to provide us with the most important ones. Also the information on certain dependent variables was limited especially on financial participation.

Important is to note that this survey made an inventory of management views on participation. It was right that the survey asked for objective formal provisions as an indicator for participation next to opinions of management about participation. We tried to include more objective indicators as much as possible. The focus on formal schemes might underestimate the phenomenon of participation on the one hand since there will be informal participation that is not covered by the survey. On the other hand the survey does not allow assessing the level of influence of employees, which is of course the core of participation. Also our own definition of profit sharing as a type of participation may be questioned. We may conclude from the results of this survey that profit sharing

is a tax driven phenomenon that most probably has nothing to do with participation. We may suggest excluding profit sharing from the participation debate.

Table 8 Summary of results of most important positive and negative contributors to type of participation								
<i>Type of participation</i>	Profit sharing		Share ownership		Direct participation		Employee representation	
<i>Contribution to phenomenon</i>	++	--	++	--	++	--	++	--
Sector								Construction
Firm size			>199	100-199			>199	<100
Work occupation						Production / transport		
Intensity of competition		low			Medium / high	low		
Independent single firm		Yes		Yes				
Internationally owned				Yes				
Collective labour agreement							Yes	No
Employee representation		No	Yes			No		
Degree of unionisation							>29%	<30%
Qualification level	high		high	low	high	low		

Table 8 Summary of results of most important positive and negative contributors to type of participation								
<i>Type of participation</i>	Profit sharing		Share ownership		Direct participation		Employee representation	
<i>Contribution to phenomenon</i>	++	--	++	--	++	--	++	--
Technical innovation					medium /intense	none		
Employment growth	increased							
Direct participation important for competitiveness	agree				agree	disagree		Disagree
Country	France UK	Italy Spain	UK	Sweden	Netherlands Ireland	Spain Italy	France Spain	Denmark
Country for which								
. favourable tax policy profit sharing	+++ ++		+		++ ++		++	
. favourable tax policy shares			+++					
. concentration of ownership high							++	
. importance of stock market			+++		+++		++	
. institutional employee influence								
. cultural climate								

Table 3a Percentages distribution of different types of intensive participation

		high particip.	high partnersh	top particip.
Affirmative (%)		4.5%	1.8%	1.5%
Affirmative (N)		172	71	56
Total N		3834	3834	3834
Country		**	**	*
	Denmark	2.7%	1.4%	1.7%
	France	13.0%	2.3%	3.4%
	Germany	2.3%	1.1%	.4%
	Ireland	.9%	.2%	—
	Italy	.5%	—	—
	Netherlands	2.9%	1.6%	2.0%
	Spain	.9%	.9%	.1%
	Sweden	5.7%	.2%	2.8%
	United Kingdom	6.9%	4.9%	2.9%
Sector				
	industry	3.4%	1.3%	.8%
	Construction	3.8%	1.7%	1.5%
	trade	6.6%	3.0%	3.3%
	services	4.5%	1.7%	.6%
Size of establishment			**	
	-49	4.5%	2.8%	3.2%
	50-99	3.8%	.7%	.6%
	100-199	4.9%	2.1%	1.7%
	200-499	4.4%	1.8%	.8%
	500 +	6.9%	4.3%	1.2%
Work type				*
	Production/transportation	3.5%	1.4%	.8%
	Commercial	7.8%	4.7%	5.3%
	repair/technical	3.5%	1.0%	.9%
	personal services	7.0%	2.9%	.5%
	Admin/clerical	11.1%	.8%	—
	other	1.7%	.6%	.5%
Intensity of competition		**		
	low	1.7%	.9%	.7%
	Medium	5.2%	2.7%	2.4%
	high	6.3%	1.7%	1.1%



Table 3a Percentages distribution of different types of intensive participation

		high particip.	high partnersh	top particip.
Independent one- establishment company				*
	no	4.9%	1.7%	.6%
	yes	4.0%	2.0%	2.3%
International ownership				
	no	4.5%	1.9%	1.6%
	yes	4.2%	1.5%	.6%
Collective agreement?		*		
	yes	5.2%	2.0%	1.9%
	no	2.2%	.9%	.4%
Degree of unionisation				*
	no union members	6.6%	2.6%	3.1%
	1-30	3.9%	1.7%	.4%
	30-69	3.3%	1.3%	.7%
	70-100	4.0%	1.9%	1.6%
Qualification level		*		*
	low	2.7%	1.5%	.6%
	Medium	2.8%	1.6%	.5%
	high	7.2%	2.7%	2.6%
Technical innovation		*		
	none	2.3%	1.3%	1.2%
	Very little	4.8%	2.0%	1.7%
	little	5.5%	2.0%	1.5%
	Medium/intense	5.9%	2.2%	1.3%
Employment growth				
	Increased	5.6%	1.0%	1.2%
	same	4.6%	2.9%	2.0%
	Reduced	3.6%	1.7%	1.2%
Dir. Particip. & competitiven.		*		
	agree	6.5%	2.6%	2.2%
	Disagree	2.2%	1.2%	.8%

\* sign. <0.05 \*\* <0.01

Table 3B

Bivariate chi-square association between independent variables and different types of participation

	high participation			high partnership			top participation		
	chi <sup>2</sup>	df	N	chi <sup>2</sup>	df	N	Chi <sup>2</sup>	df	N
Country	53.0**	8	3834	22.1**	7	3433	14.9*	6	3169
Sector	2.6	3	3834	1.7	3	3834	6.0	3	3834
Firm size	4.3	4	3834	14.1**	4	3834	5.3	4	3834
Work type	10.5	5	3834	7.2	5	3834	9.5*	4	3608
Intensity of competition	11.2**	2	3467	2.9	2	3467	2.6	2	3467
Independent ownership	0.3	1	3834	0.1	1	3834	5.9*	1	3834
International ownership	0.0	1	3834	0.3	1	3834	2.3	1	3834
Collective agreement	6.1*	1	3661	2.4	1	3661	3.3	1	3661
Degree of unionisation	2.1	3	3605	0.7	3	3605	9.9*	3	3605
Qualification level	8.5*	2	3123	0.9	2	3123	6.5*	2	3123
Technical innovation	8.5*	3	3834	1.3	3	3834	0.2	3	3834
Employment growth	1.5	2	3720	3.8	2	3720	0.4	2	3720
Dir. particip. & competitiveness	5.7*	1	3164	1.1	1	3164	2.1	1	3164

Table 4  
Multivariate logit analysis of the effects of the independent variables on  
types of participation

		profit sharing	share ownership	Direct particip.	employee represent.
Country		**	**	**	**
	Denmark	-.11	.43	-.24	-1.50**
	France	1.84**	-.31	.32	.81**
	Germany	-.19	-.28	.20	-.22
	Ireland	-.53*	.07	.47**	-.28
	Italy	-1.45**	-.67	-.53**	-.17
	Netherlands	-.19	-.47	.57**	.17
	Spain	-1.24**	.40	-1.22**	.58*
	Sweden	.49	-1.15	.11	.21
	United Kingdom	1.38**	1.98**	.31*	.41
Sector					*
	Industry	-.18	-.13	-.03	.23
	Construction	-.14	-.20	-.27*	-.39*
	trade	.24	.47	.16	.26
	Services	.08	-.14	.14	-.09
Firm size			**		**
	-49	-.20	-.46	.25	-1.16**
	50-99	.09	.03	.16	-.33*
	100-199	-.02	-.50*	-.07	-.10
	200-499	.06	.39*	-.23*	.53**
	500 +	.08	.54**	-.10	1.06**
Work type				*	
	production/transportation	.13	.27	-.35**	.20
	Commercial	.12	-.04	.24	-.01
	repair/technical	-.07	-.16	-.11	-.09
	personal services	.16	.10	.35	-.17
	admin/clerical	-.10	-.14	.04	.14
	other	-.24	-.03	-.16	-.07
Intensity of competition		*		*	
	low	-.33*	.00	-.25*	-.06
	Medium	.22	.20	.17*	.13
	high	.14	-.01	.19*	.19
	Missing	-.04	-.19	-.12	-.26
Independent ownership		-.66**	-.77**	.03	-.33
International ownership		-.16	-.86**	.25	-.23
Ownership status missing		-.48	-.46	.58*	-.40

Table 4  
Multivariate logit analysis of the effects of the independent variables on  
types of participation

		profit sharing	share ownership	Direct particip.	employee represent.
Collective agreement					**
	yes	-.24	.33	.02	.41*
	no	-.12	-.12	.09	-.58**
	Missing	.35	-.20	-.12	.17
Employee representation		**	**	**	
	no	-.61**	-.33	-.37**	
	yes	.25	.51*	.24*	
	Missing	.36	-.18	.14	
Degree of unionisation					**
	no union members	.18	.43	.15	-1.53**
	1-30	.19	.15	.02	-.46**
	30-69	-.29	-.25	-.06	.54**
	70-100	-.39	-.17	.03	1.72**
	Missing	.31	-.17	-.14	-.27
Qualification level		*	**	**	
	low	-.17	-.48*	-.46**	.25
	Medium	-.12	.37	.10	-.10
	high	.35**	.49**	.39**	-.01
	Missing	-.05	-.38	-.03	-.14
Technical innovation				**	
	none	-.26	.14	-.39**	-.01
	Very little	.02	-.09	-.13	.07
	little	.08	-.13	.22*	-.10
	medium/intense	.16	.08	.30*	.03
Employee growth		**		**	
	Increased	.53**	.20	.20	-.20
	same	.02	-.15	.01	-.16
	Reduced	.03	-.09	-.26	.08
	Missing	-.58	.04	.05	.28
Dir. particip. & competitiveness.		**		**	**
	agree	.37**	.28	.48**	.21
	Disagree	-.22	.27	-.38**	-.41**
	no answer	-.15	-.55**	-.11	.20

## Biographical Note

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*Dr. John Hendrickx* (1958). Senior Researcher at Nijmegen School of Management, University of Nijmegen. John Hendrickx studied sociology at the University of Nijmegen, where he received his PhD in 1994. He has done research on religious stratification, occupational attainment and transitions on the labour market. His research interests include social stratification, labour market studies, and models for categorical data analysis.

*Prof. Dr. Fred Huijgen* (born in 1943) graduated in sociology from the State University Groningen, The Netherlands, in 1970. Since 1989 he is employed as full professor in Business Administration at the Nijmegen School of Management, University of Nijmegen, University of Nijmegen, The Netherlands. He takes special interest in Organisation Theory and Organisational Design, Quality of Working Life, Labour Market and Industrial Relations. His main research activities concern international comparative empirical research on labour market flexibility and organisational renewal. He teaches Organisation Theory, -Design and -Change, HRM and Labour Market Theory.

## References

- Albert, M. (1991), *Capitalisme contre capitalisme*, Paris: Editions du Seuil
- Bell, D.W. & Hanson, C.G., (1989), *Profit Sharing and Profitability*, London, Kogan-Page.
- Benders, J., & Huijgen, f. & Pekruhl, U. & O'Kelly, K. (1999), *Useful but unused. Group Work in Europe*.  
Dublin: European Foundation for the improvement of Living and Working Conditions.
- Blanchflower, D. & Oswald, A. (1986), *Profit-sharing: does it work?*, NBS, London.
- Blanchflower, D. & Oswald, A. (1986), *Profit-sharing: does it work?*, NBS, London.
- Blasi, J.R. & Conte, M. & Kruse, D., (1996), 'Employee stock ownership and corporate performance among public companies', *Industrial and Labor Relations Review*, Vol.50, no.1, October.
- Blasi, J.R., D.L. Kruse (1995), *Employee ownership, employee attitudes and firm performance*. Cambridge MA
- Bradley, K., S. Estrin, et al. (1990) Employee ownership and company performance. In: *Industrial Relations*. Vol 29, no 3
- Buchko, A.A., (1992), 'Employee Ownership, Attitudes and Turnover: An Empirical Assessment', *Human Relations*, Vol.34, no.7, pp.711-731.
- Cable, J.R. & Wilson, N., (1988), *Profit-sharing and productivity: an international comparison*, Economic Research Papers no.301, University of Warwick, September.
- Cheadle, A (1989), Explaining patterns of profit sharing activity, *Industrial Relations*, Vol. 28, No 3, p398-400
- Cotton, J.L., (1993), 'Employee participation: Diverse forms and outcomes'. *Academy of Management review*. no.1, 1988
- Cressey, P. & Williams, R., (1990), *Participation in change; New technology and the role of employee involvement*. Dublin: European Foundation for the improvement of Living and Working Conditions.
- d'Iribarne, Philippe (1989), *La logique de l'honneur; Gestion des entreprises en traditions nationales*, Parijs: Editions du Seuil.
- European Commission (1997) Green Paper *Partnership for a new organisation of work*. Brussels, April 1997
- European Foundation (1997) *New Forms of Work Organisation. Can Europe realise its potential? Results of a survey of direct employee participation in Europe*. European foundation for the improvement of living and working conditions, Luxembourg: Office for Official Publications of the European Communities
- Festing, M., Y. Groening, R. Kabst, W. Weber (1999) 'Financial Participation in Europe - Determinants and Outcomes', *Economic and Industrial Democracy*, Vol. 20, No 2, p.295-329
- Fröhlich, D. and U. Pekruhl (1996) *Direct Participation and Organisational Change - Fashionable but Misunderstood? An analysis of recent research in Europe, Japan and the USA*. Luxembourg: Office for the Official Publications of the European Communities
- Gallie, D. (1983) *In search for the new working class: Automation and integration within the capitalist enterprise*, Cambridge
- Gatley, S. et al. (1996) *Comparative management: a transcultural odyssey*, London: McGraw-Hill
- Hampden-Turner C. & F. Trompenaars (1993), *The seven cultures of capitalism*, London: Piatkus
- Hofstede, G. (1980) *Culture's consequences: international differences in work related values*, London
- Jones, D. & Kato, T., (1995), Productivity Effects of ESOP's and bonuses: Evidence from Japanese Panel data, *The American Economic Review*, Vol.85, no.3, July, pp.391-414.
- Jones, D.C., J. Pliskin (1989) British evidence on the employment effects of profit sharing. In: *Industrial Relations*. Vol 28, no 1

- Jones, D.C., J. Pliskin (1991), 'The effects of worker participation, employee ownership and profit sharing on economic performance: A partial review', in Russell and Rus (1991), pp.43-63
- Kern, H. and M. Schumann (1984) *Das Ende der Arbeitsteilung? Rationalisierung in der industriellen Produktion*, Munich: Beck
- Kruse, D., (1992), Profit Sharing and Productivity: Macro-economic evidence from the U.S.A., *Economic Journal*, Vol. 102, no.410, pp. 24-36.
- Kumbhakar, S.C. & Dunbar, A.E., (1993), 'The elusive ESOP-productivity link: Evidence from US firm-level data', *Journal of Public Economics*, no.52, pp.273-283.
- Lammers, C.J. & Szell, G., (eds), (1989), *International Handbook of Participation in Organizations: Vol.1, Organizational Democracy: Taking Stock*, Oxford University Press, Oxford.
- Lammers, J and B. Pelzer (1992) 'Linear Models and Nominal Variables'. In: *Kwantitatieve Methoden*, Vol. 39, p5-17
- Lane, C. (1989) *Management and labour in Europe*, Aldershot
- Latniak, E. (1994) *Public schemes promoting active involvement of employees in innovation*. Paper for the preparation of the SPRINT/EIMS Workshop, December 7/8, 1994 Luxembourg
- Lessem, R and F. Neubauer (1994) *European management systems: towards unity out of cultural diversity*, London: McGraw-Hill
- Logue, J., Y.S. Yates (1999) 'Worker Ownership American Style: Pluralism, Participation and Performance' *Economic and Industrial Democracy*, Vol. 20, No 2, p.225-252
- Lohr, S.L. (1999). *Sampling: Design and Analysis*. Pacific Grove: Duxbury Press.
- Long, R.J., (1982), 'Worker Ownership and Job Attitudes', *Industrial Relations*, Vol.21, Spring, pp.161-215.
- Long, J. Scott. (1997). *Regression models for categorical and limited dependent variables*. London: Sage Publications.
- Maurice, M., A. Sorge and M. Warner (1980), Societal differences in organizing manufacturing units, *Organization Studies 1*, p. 59-86.
- Mol, H., H. Meihuizen en E. Poutsma (1997), Winstdeling, aandelen en opties voor werknemers, *Economische Statistische Berichten*, 13 augustus 1997, blz. 613-615.
- Mygind, N. and Ch. P. Rock (1993), 'Financial Participation and the Democratization of Work.', *Economic and Industrial Democracy*. Vol.14, Nr.2, May 1993
- Nagelkerke, A.G. and W.F. de Nijs (1998) Institutional dynamics in European industrial relations. In: *LABOUR*, Vol.4 1998, p743-769
- Nuti, D.M., (1988), 'Codetermination, profit-sharing and full employment', in Jones & Svejnar (eds), *Advances in the Economic Analysis of Participatory and Labor Managed Firms*, Vol.3, JAI Press, Greenwich-London; published also as Working Paper no.86/228, European University Institute, Florence.
- OECD, (1995), 'Profit-Sharing in OECD countries', *Employment Outlook*, OECD; Paris, July, 1995.
- Osterman, P. (1994) 'How common is workplace transformation and how can we explain who adopts it: Results from a national survey', *Industrial and Labor Relations Review*, Vol. 47, No. 2, p.173-188
- Pendleton, A. (1997) 'Characteristics of workplaces with financial participation: evidence from the Workplace Industrial Relations Survey. *Industrial Relations Journal*, 28, p103-119
- Pendleton, A. (1999) 'Profit sharing and employee share ownership', In: Thorpe, R. and G. Homan, *Reward Systems*, Pitman Publishers
- Pennings, J.M. (1993) Executive reward systems: A cross-national comparison. In: *Journal of Management Studies*, 30 (2), p.261-280.
- PEPPER report II, (1997) *Promotion of participation by employed persons in profits and enterprise results (including equity participation) in member states*, Brussels, Commission of the European Communities COM (96)697 final
- PEPPER report, The, (1991), 'Promotion of employee participation in profits and enterprise results', *Social Europe*, Supplement 3/91 Commission of the European Communities.

- Poole, M. & Jenkins, G., (1991), *The impact of economic democracy. Profit-sharing and employee-shareholding schemes*, London, Routledge.
- Poole, M., (1988), 'Factors affecting the development of employee financial participation in contemporary Britain: Evidence from a national survey', *British Journal of Industrial Relations*, no.1.
- Poutsma, E. en H. van den Tillaart (1996) *Financiële werknemersparticipatie in Nederland: tijd voor beleid!* Nederlands Participatie Instituut, Den Haag
- Poutsma, E., F. Huijgen (1999) 'European diversity in the use of participation schemes', *Economic and Industrial Democracy*, Vol. 20, No 2, p.197-224
- Poutsma, E., J. Benders, G. van Hooft, W. de Nijs (1996), Van Bovenaf en Van Onderop. Het belang van menselijk kapitaal. In: Pfeffer, J., *Succesvol Ondernemen is Mensenwerk*. Boekwerk, Groningen
- Poutsma, E., W. de Nijs, H. Doorewaard (1999) 'Promotion of employee ownership and profit sharing in Europe' *Economic and Industrial Democracy*, Vol. 20, No 2, p.171-196
- Regalia, I (1995) *Humanise Work and Increase Profitability? Direct participation in organisational change viewed by the social partners in Europe*. EF/95/21/EN Luxembourg: Office for the Official Publication of the European Communities
- Russell, R. and Rus, V. (1991), *International Handbook for Participation in Organisations II. Ownership and Participation*, Oxford: Oxford University Press
- Sisson, K. (1996) *Closing the Gap - Ideas and Practice in Organisational Change*, EF/96/15/EN Luxembourg: Office for the Official Publication of the European Communities
- Sorge, A. and M. Warner (1987) *Comparative factory organization: an Anglo-German comparison*, Aldershot
- Sparrow, P and J.M. Hiltrop (1994) *European human resource management in transition*, Hemel Hempstead: Prentice Hall
- Spear, R. (1999) 'The Rise and Fall of Employee-owned UK Bus Companies', *Economic and Industrial Democracy*, Vol. 20, No 2, p.253-267
- StataCorp. (1999). *Stata Statistical Software: Release 6.0*. College Station, TX: Stata Corporation
- Uvalic, M. (1991), Pepper Report. Promotion of employee participation in profits and enterprise results. in: *Social Europe*, Supplement 3/91, Commission of the European Communities
- Uvalic, M. (1993) Workers' Financial Participation in the European Community. In: *Economic and Industrial Democracy*, Vol. 14 , p.185-194
- Voets, H. and R. Spear (1995) *Success and Enterprise: Significance of Employee Ownership and Participation*. Aldershot: Avebury
- Wadhvani, S. & Wall, M., (1990), 'The effects of profit-sharing on employment, wages, stock returns and productivity: evidence from micro-data', *Economic Journal*, Vol.100, no.399.
- Weimer, J., J.C. Pape, A taxonomy of Systems of Corporate Governance. In: *Corporate Governance*, Vol. 7, No. 2, pp.152-166, and April 1999
- Winther, G. (1999) 'Theory O - Is the case closed?' , *Economic and Industrial Democracy*, Vol. 20, No 2, p.269-293
- Womack, J.P., D.T. Jones and D. Roos (1990) *The machine that changed the world*, New York: Rawson Associates